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EXAMINER

RYAN, PATRICK A

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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/690,674
Filing Date: October 22, 2003
Appellant(s): ROYE, STEVEN A.

Mr. Walter J. Tencza Jr.
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed February 10, 2009 appealing from the Office action mailed October 27, 2008.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

2004/0117815 A1	Kondo et al.	06-2004
5,812,642	Leroy	09-1998
6,457,010 B1	Eldering et al.	09-2002

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1-4, 7-11, 15, 18, 20, 21, 22, and 26 rejected under 35 U.S.C. 103(a) as being unpatentable over Kondo et al., United States Patent Application Publication (2004/0117815 A1), hereinafter "Kondo" in view of Leroy, United States Patent (5,812,642).

In regards to Claim 1, Kondo teaches a method comprising recording a first length of time of a first positive audience response (characteristic amount 304 of Fig. 25C is voice data recorded from an audience. When characteristic amount exceeds the level of threshold La3 a determination of laughing is estimated, as disclosed in Paragraph [0124]) of one or more test subjects to a presentation (audience 60, as shown in Fig. 2). Kondo further discloses that Output Unit 50 displays the audience response data, such as that of Fig. 25C, as disclosed in Paragraphs [0127, 0128]; with further reference to Paragraph [0157]. Kondo's audience response data is displayed in

a graphical format, but from Fig. 25C it is unclear if a first numerical value for the first length of time and a first alphanumeric heading identifying the first numerical value are displayed on the computer monitor.

In a similar field of invention, Leroy teaches a system and method for monitoring and analyzing audience response to a broadcast promotion where various methods of manipulating and displaying response data are demonstrated (Abstract). Leroy discloses the real-time display of audience telephone call activity regarding a promotional presentation. This real-time display is presented on a computer monitor in the form of a graphical timeline showing a variety of numerical values and alphanumeric headings. In particular, Figs. 4 and 7 demonstrates the analysis of audience interaction with a promotional presentation containing a sequence of segments plotted as a function of time, numerically displayed in units of minutes, and annotated with a variety of alphanumeric headings, such as "FINAL REPORT", "DATE", "START TIME", and "STOP TIME" (as shown in Fig. 7 and described in Col. 4 Line 45—Col. 5 Line 8, Col. 7 Lines 42-60; with further reference to Video Screen 18 of Fig. 3, as described in Col. 6 Lines 16-21 and Fig. 4 as described in Col. 6 Lines 51-62).

Both Kondo and Leroy teach methods for graphically displaying audience response data regarding a presentation. Kondo teaches displaying audience response using a Characteristic Amount graph and Leroy teaches displaying audience response data in a graphical format including numerical and alphanumeric annotations. In view of the similar teachings of Kondo and Leroy, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method of graphically

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characterizing audience response to a performance, as taught by Kondo, to include numerical values and alphanumeric annotations representing these values, as taught by Leroy, in order to provide the end user with descriptive labels and numeric references to aid in efficiently identifying the meaning of the displayed results.

In regards to Claim 2, the combination of Kondo and Leroy teach the method of Claim 1 wherein the presentation is a performance (audience 60 in presented with a movie or TV program on display device 61 of Fig. 2, as described by Kondo in Paragraph [0094]).

In regards to Claim 3, the combination of Kondo and Leroy teach the method of Claim 1 wherein first positive audience response is audible (estimation of “beating time with hands”, “clapping”, or “laughing”, as disclosed by Kondo in Paragraphs [0119-0124]).

In regards to Claim 4, the combination of Kondo and Leroy teach the method of Claim 1 further comprising recording a total length of time of the presentation (Kondo teaches the estimated result, such as characteristic amount 304 contains a total time period, shown along the time access, and a time period of positive response, shown when characteristic amount 304 exceeds threshold La3, as described in Paragraph [0124]); displaying a second numerical value for the total length of time of the presentation on the computer monitor (Leroy teaches that each promotional segment can be tracked and the total length of time is displayed for each segment, as shown in “DAILY TAB” #MIN. column of Fig. 5, as described in Col. 5 Lines 8-23); and displaying a second alphanumeric heading on the computer monitor, wherein the second

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alphanumeric heading indicates what the second numerical value refers to (Leroy teaches that each program segment is displayed according to a PROGRAM NAME, as shown in Fig. 5 and described in Col. 5 Lines 8-23).

In regards to Claim 7, the combination of Kondo and Leroy teach the method of Claim 1 wherein the first positive audience response is comprised of laughter of the one or more test subjects (estimation of state of laughing, as disclosed by Kondo in Paragraph [0124]).

In regards to Claim 8, the combination of Kondo and Leroy teach the method of Claim 1 wherein the accumulated amount of time of positive audience response is comprised of an accumulated amount of time of laughter of the one or more test subjects (characteristic amount 304, representing an audible response, is recorded over duration of time 't' as shown in Fig. 25C, as described by Kondo in Paragraph [0124]).

In regards to Claims 9 and 10, the combination of Kondo and Leroy teach the method of Claim 1 further comprising determining and displaying on the computer monitor a second and third numerical value for an accumulated amount of time of positive audience response of one or more test subjects for a first minute of the presentation or for a second minute of a presentation respectively (Kondo discloses a variable size window of time in which to analyze the audience response. This variable window of time is dependent upon the periodicity of the audience response, as disclosed in Paragraph [106]. Therefore Kondo's characteristic amount may be measure as a function of time in minutes. In addition, Leroy teaches the display of audience interaction as a function of time in minutes, as shown in Fig. 7, where the

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Time Line 20 can be broken into a number of segments, as described in Col. 5 Lines 1-8 and Col. 6 Lines 22-65; with further reference to Fig. 4).

In regards to Claim 11, the combination of Kondo and Leroy teach the method of Claim 1, further comprising determining and displaying on the computer monitor a second numerical value for an average amount of time of positive audience response of one or more test subjects per minute of the presentation (Kondo teaches that volumes of sounds are averaged and compared with threshold values, as disclosed in Paragraph [0127]. In addition, characteristic amount 805 shown in Fig. 52 demonstrates the display of a ratio of two characteristic amounts as a function of time, as described in [0181]. Furthermore, Leroy teaches the display of multiple numerical values, as shown in Fig. 7 and described in Col. 4 Line 45—Col. 5 Line 8, Col. 7 Lines 42-60; with further reference to Video Screen 18 of Fig. 3, as described in Col. 6 Lines 16-21 and Fig. 4 as described in Col. 6 Lines 51-62).

In regards to Claim 15, Kondo teaches an apparatus comprising a performance timer for keeping track of the length of time of a performance (frame range decision unit 3231 of Fig. 12 determines the time window used to analyze the audience response, as disclosed in Paragraph [0106]); a positive audience response timer for keeping track of the length of time of a positive audience response of an audience comprised of one or more test subjects, to one or more portions of the performance (integration estimation unit 40 of Fig. 1, estimates the state of the audience using characteristic amounts, as disclosed in Paragraph [0119]. This estimation involves the tracking of response within

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the time window of 22C1, as shown in Fig. 25C); a computer processor (CPU 701, as shown in Fig. 27 and described in Paragraph [0132]); and a computer monitor (Display unit 716, as shown in Fig. 27 and described in Paragraph [0132]); wherein the computer processor displays a running time of the performance timer and a running time of the positive audience response timer on the computer monitor (output unit 50 of Fig. 1 displays the estimated result, as disclosed in Paragraph [0128]. In addition, the estimated result, such as characteristic amount 304 contains a total time period, shown along the time access, and a time period of positive response, shown when characteristic amount 304 exceeds threshold La3, as described in Paragraph [0124]).

Kondo's audience response data is displayed in a graphical format, but from Fig. 25C it is unclear if a first/second numerical values for the performance timer and the positive audience response timer respectively, and a first/second alphanumeric headings identifying the first/second numerical values are displayed on the computer monitor by way of the processor.

In a similar field of invention, Leroy teaches a system and method for monitoring and analyzing audience response to a broadcast promotion where various methods of manipulating and displaying response data are demonstrated (Abstract). Leroy discloses the real-time display of audience telephone call activity regarding a promotional presentation. This real-time display is presented on a computer monitor in the form of a graphical timeline showing a variety of numerical values and alphanumeric headings. In particular, Figs. 4 and 7 demonstrates the analysis of audience interaction with a promotional presentation containing a sequence of segments plotted as a

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function of time, numerically displayed in units of minutes, and annotated with a variety of alphanumeric headings, such as "FINAL REPORT", "DATE", "START TIME", and "STOP TIME" (as shown in Fig. 7 and described in Col. 4 Line 45—Col. 5 Line 8, Col. 7 Lines 42-60; with further reference to Video Screen 18 of Fig. 3, as described in Col. 6 Lines 16-21 and Fig. 4 as described in Col. 6 Lines 51-62).

Both Kondo and Leroy teach methods for graphically displaying audience response data regarding a presentation. Kondo teaches displaying audience response using a Characteristic Amount graph and Leroy teaches displaying audience response data in a graphical format including numerical and alphanumeric annotations. In view of the similar teachings of Kondo and Leroy, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method of graphically characterizing audience response to a performance, as taught by Kondo, to include numerical values and alphanumeric annotations representing these values, as taught by Leroy, in order to provide the end user with descriptive labels and numeric references to aid in efficiently identifying the meaning of the displayed results.

In regards to Claim 18, the combination of Kondo and Leroy teach the apparatus of Claim 15 wherein the positive audience response is comprised of laughter of the one or more test subjects in the audience (Kondo teaches the estimation of state of laughing, as disclosed in Paragraph [0124]).

In regards to Claim 20, the combination of Kondo and Leroy teach the apparatus of Claim 15 wherein the computer processor determines and displays on the computer monitor a third numerical value for an accumulated amount of time of positive audience

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response of the one or more test subjects for a first minute of the performance (Kondo discloses a variable size window of time in which to analyze the audience response.

This variable window of time is dependent upon the periodicity of the audience response, which is determined by frame range decision unit 3231, as disclosed in Paragraph [106]. Therefore Kondo's characteristic amount may be measure as a function of time in minutes. In addition, Leroy teaches the display of audience interaction as a function of time in minutes, as shown in Fig. 7, where the Time Line 20 can be broken into a number of segments, as described in Col. 5 Lines 1-8 and Col. 6 Lines 22-65; with further reference to Fig. 4).

In regards to Claim 21, the combination of Kondo and Leroy teach the apparatus of Claim 20 wherein the computer processor determines and displays on the computer monitor a fourth numerical value for the accumulated amount of time of positive audience response of one or more test subjects for a second minute of the performance (Kondo discloses a variable size window of time in which to analyze the audience response. This variable window of time is dependent upon the periodicity of the audience response, which is determined by frame range decision unit 3231, as disclosed in Paragraph [106]. Therefore Kondo's characteristic amount may be measure as a function of time in minutes. In addition, Leroy teaches the display of audience interaction as a function of time in minutes, as shown in Fig. 7, where the Time Line 20 can be broken into a number of segments, as described in Col. 5 Lines 1-8 and Col. 6 Lines 22-65; with further reference to Fig. 4).

In regards to Claim 22, the combination of Kondo and Leroy teach the apparatus Claim 15 wherein the computer processor determines and displays on the computer monitor a third numerical value for an average amount of time of positive audience response of the one or more test subjects per minute of the performance (Volumes of sounds are averaged and compared with threshold values, as disclosed in Paragraph [0127]. In addition, characteristic amount 805 shown in Fig. 52 demonstrates the display of a ratio of two characteristic amounts as a function of time, as described in [0181]. These functions are performed by component ratio calculation unit 823, as described in Paragraph [0164]. In addition, Leroy teaches the display of audience interaction as a function of time in minutes, as shown in Fig. 7, where the Time Line 20 can be broken into a number of segments, as described in Col. 5 Lines 1-8 and Col. 6 Lines 22-65; with further reference to Fig. 4).

In regards to Claim 26, the combination of Kondo and Leroy teach the apparatus of Claim 15 wherein the positive audience response is audible (estimation of "beating time with hands", "clapping", or "laughing", as disclosed in Paragraphs [0119-0124]).

Claims 5, 6, 12, 13, 14, 16, 17, 19, 23, 24, and 25 rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Kondo and Leroy in view of Eldering et al., United States Patent (6,457,010 B1), hereinafter "Eldering".

In regards to Claim 5, 6, 16, and 17, the combination of Kondo and Leroy teach the method of Claim 1 and apparatus of Claim 15 further comprising determining an

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accumulated amount of time of positive audience response of one or more test subjects to a presentation (characteristic amount 304, representing an audible response, is recorded over duration of time 't' as shown in Fig. 25C, as described in Paragraph [0124]). In addition, Kondo teaches tracking the total time of the presentation (as shown in Fig. 25C, characteristic amount 304 is plotted as a function of time). Kondo also teaches displaying the time of positive audience response and the total time of presentation (output unit 50 of Fig. 1 displays the estimated result, as disclosed in Paragraph [0128]. In addition, the estimated result, such as characteristic amount 304 contains a total time period, shown along the time access, and a time period of positive response, shown when characteristic amount 304 exceeds threshold La3, as described in Paragraph [0124]). Furthermore, Leroy teaches displaying alphanumeric headings and multiple numerical values on the computer monitor (as shown in Fig. 7 and described in Col. 4 Line 45—Col. 5 Line 8, Col. 7 Lines 42-60; with further reference to Video Screen 18 of Fig. 3, as described in Col. 6 Lines 16-21 and Fig. 4 as described in Col. 6 Lines 51-62).

The combination of Kondo and Leroy does not teach determining a ratio of the accumulated amount of time of positive audience response divided by the length of total time of the presentation; and wherein the ratio is displayed as a percentage of total time of the presentation.

In a similar field of invention Eldering discloses a user monitoring and profiling method that involves tracking user characteristics such as the time duration that a program is watched and the volume at which the program is listened. Eldering uses a

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number of probabilistic techniques in order to profile the user's viewing habits (Eldering Abstract). Eldering monitors the duration of time that a use watches a given program over a 24 hour period based on the occurrence of channel changes (as shown in Fig. 5 with reference to Col. 9 Lines 13-24) and records the time durations for each channel and the total time watched (as shown in minutes watched 702 of Fig. 7 with reference to Col. 9 Lines 33-47). Eldering then uses the statistical data of Fig. 7 to develop a representation of a user's interests in the form of a probability, which ranges from 0 to 1, as shown in Fig. 9A-9F.

In addition Eldering teaches a processor, system control unit 200 of Fig. 2, which monitors channel selection times, the time of channel changes, and the number of channel changes occurring during a viewing time (as described in Col. 7 Lines 23-67 and Col. 8 Lines 1-31).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combined the audience state estimation method of Kondo and Leroy with the method of characterizing a user's action using statistical measures, such as ratio, as taught by Eldering because statistical measures are an effective way to monitor a user or group of users when each user can not be specifically identified (as Eldering discloses in Col. 2 Lines 23-31). The Examiner also notes that representing a probability on a scale from 0 to 1 can equivalently be represent as a ratio (0/0 to 1/1) or a percent (0% to 100%) and that these representations are well known in the art of user profiling.

In regards to Claim 19, the combination of Kondo, Leroy, and Eldering teach the apparatus of Claim 16 wherein the accumulated positive audience response time is comprised of an accumulated amount of time of laughter of the one or more test subjects (characteristic amount 304, representing an audible response, is recorded over duration of time 't' as shown in Fig. 25C, as described in Paragraph [0124]).

In regards to Claims 12, 13, 23, and 24 the combination of Kondo and Leroy teach the method of Claim 1 and apparatus of Claim 15. Kondo further teaches detecting the sound periodicity from the audience based on an audio signal (as disclosed in Paragraph [0014]). In addition, Leroy teaches tracking the number of callers as a function of time (as shown in Fig. 4). Furthermore, Leroy teaches displaying alphanumeric headings and multiple numerical values on the computer monitor (as shown in Fig. 7 and described in Col. 4 Line 45—Col. 5 Line 8, Col. 7 Lines 42-60; with further reference to Video Screen 18 of Fig. 3, as described in Col. 6 Lines 16-21 and Fig. 4 as described in Col. 6 Lines 51-62).

The combination of Kondo and Leroy does not teach determining total number of positive audience responses with in the first minute and the second minute respectfully.

In a similar field of invention Eldering discloses a user monitoring and profiling method that involves tracking user characteristics such as the time duration that a program is watched and the volume at which the program is listened. Eldering uses a number of probabilistic techniques in order to profile the user's viewing habits (Eldering

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Abstract). Eldering monitors the duration of time that a use watches a given program over a 24 hour period based on the occurrence of channel changes (as shown in Fig. 5 with reference to Col. 9 Lines 13-24) and records the time durations for each channel and the total time watched (as shown in minutes watched 702 of Fig. 7 with reference to Col. 9 Lines 33-47). Eldering records the instants in time in which the user changes the channel (as shown in Col. 602 of Fig. 6). These time durations are then used to determine the frequency of channel changes made by the user and the total number of channel changes made by the user (as shown in channel changes 704 of Fig. 7).

In addition Eldering teaches a processor, system control unit 200 of Fig. 2, which monitors channel selection times, the time of channel changes, and the number of channel changes occurring during a viewing time (as described in Col. 7 Lines 23-67 and Col. 8 Lines 1-31).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combined the audience state estimation and alphanumeric display method using sound periodicity and alphanumeric display as taught by Kondo and Leroy with the method of characterizing a user's action using statistical measures, such as channel changing frequency and time duration between channel changes, as taught by Eldering because statistical measures are an effective way to monitor a user or group of users when each user can not be specifically identified (as Eldering discloses in Col. 2 Lines 23-31).

In regards to Claim 14 and 25, the combination of Kondo and Leroy teach the method of Claim 1 and the apparatus of Claim 15. Kondo further teaches detecting the sound periodicity from the audience based on an audio signal (as disclosed in Paragraph [0014]). Furthermore, Leroy teaches displaying alphanumeric headings and multiple numerical values on the computer monitor (as shown in Fig. 7 and described in Col. 4 Line 45—Col. 5 Line 8, Col. 7 Lines 42-60; with further reference to Video Screen 18 of Fig. 3, as described in Col. 6 Lines 16-21 and Fig. 4 as described in Col. 6 Lines 51-62).

The combination of Kondo and Leroy does not teach determining the average number of positive audience responses of the one or more test subjects per minute of the presentation.

In a similar field of invention Eldering discloses a user monitoring and profiling method that involves tracking user characteristics such as the time duration that a program is watched and the volume at which the program is listened. Eldering uses a number of probabilistic techniques in order to profile the user's viewing habits (Eldering Abstract). Eldering monitors the duration of time that a use watches a given program over a 24 hour period based on the occurrence of channel changes (as shown in Fig. 5 with reference to Col. 9 Lines 13-24) and records the time durations for each channel and the total time watched (as shown in minutes watched 702 of Fig. 7 with reference to Col. 9 Lines 33-47). Eldering records the instants in time in which the user changes the channel (as shown in Col. 602 of Fig. 6). These time durations are then used to determine the frequency of channel changes made by the user and the total number of

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channel changes made by the user (as shown in channel changes 704 of Fig. 7). In addition, Eldering tracks the volume changes made by the user as a function of time (as shown in Fig. 5 and disclosed in Col. 9 Lines 13-24) and records the average volume selection over a given time period (as shown in Fig. 7 with respect to Time of Day 700 and Average Volume 706, as described in Col. 9 Lines 33-47).

In addition Eldering teaches a processor, system control unit 200 of Fig. 2, which monitors channel selection times, the time of channel changes, and the number of channel changes occurring during a viewing time (as described in Col. 7 Lines 23-67 and Col. 8 Lines 1-31).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combined the audience state estimation method using sound periodicity and alphanumeric display as taught by Kondo and Leroy with the method of characterizing a user's action using statistical measures, such as average level of volume monitored over a duration of time, as taught by Eldering because statistical measures are an effective way to monitor a user or group of users when each user can not be specifically identified (as Eldering discloses in Col. 2 Lines 23-31).

(10) Response to Argument

The Examiner respectfully disagrees that the rejection should be reversed. Only those arguments having been raised are being considered and addressed in the Examiner's Answer. Any further arguments regarding other elements or limitations not specifically argued or any other reasoning regarding deficiencies in a prima facie case

of obviousness that the Appellant could have made are considered by the Examiner as having been conceded by the Appellant for the basis of the decision of this appeal. They are not being addressed by the Examiner for the Board's consideration. Should the panel find that the Examiner's position/arguments or any aspect of the rejection is not sufficiently clear or a particular issue is of need of further explanation, it is respectfully requested that the case be remanded to the Examiner for further explanation prior to the rendering of a decision.¹

Response to Claims 1-4, 7-11, 15, 18, 20, 21, 22, and 26 should not have been rejected under 35 U.S.C. 103 based on Kondo in view of Leroy

Appellant presents that Claims 1 (and 2-3, and 7-11) should not have been rejected under 35 U.S.C. 103 based on Kondo in view of Leroy.

The Examiner interprets four main points presented by the Appellant:

(1) Appellant presents that Kondo does not disclose “displaying a first numerical value for a first length of time on a computer monitor for a first positive audience response” or “displaying a first alphanumeric heading on the computer monitor which indicates what the first numerical value refers to” because “[t]he time axis in these graphs [Kondo Figs. 25A-C] is not labeled with numbers so there is no way of knowing from the graphs how long a particular audience state lasts” (Brief Pages 9-10).

(2) Appellant additionally presents that “[t]here is no disclosure in Kondo that the length of time of an audience state should be saved or displayed” because “Kondo uses ‘frame periods’ to determine an audience state, but these frame periods are not lengths

¹ See 37 CFR 41.50(a)(1) and MPEP 1211.

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of time of positive audience response but rather a predetermined fixed period of time” (Brief Page 10; with further reference to Kondo Paragraph [0113]). Appellant also points out that “22C1” and “22C2” of Fig. 25C are described by Kondo as “states” not as “times” and there is no indication that a time is stored corresponding to states 22C1 and 22C2 (Brief Pages 10-11; with further reference to Kondo Paragraph [0124] and Fig. 25C).

(3) Appellant further presents that “[t]here is no disclosure that Output Unit 50 outputs a graph, or any times” because “there is no indication that Fig. 25C is output by Output unit 50” (Brief Page 11).

(4) Appellant lastly presents that “Leroy does not disclose recording a first length of time of a first positive audience response of one or more test subjects to a presentation” (Brief Page 11).

Point (1) will be addressed last.

Regarding point (2), the Examiner presumes that Appellant is referring to the “recording” limitation of Claim 1 and will respond accordingly. The Examiner has previously presented the following (Page 4 Section 7 of Final Office Action of October 27, 2008):

The Examiner submits that Kondo uses Variance Calculation Unit 323 of Fig. 12 to keep track of “periodicity of an audience state” and “periodic fluctuation” in behavior, as described in Paragraph [0106]; with further reference to Office Action Page 5. It is the Examiner's position that the length of time of a performance and the length of time of a positive audience response are both tracked in order to generate the Characteristic Amount graphs as a function of time, such as that of Fig. 25C and time durations 22C1 and 22C2. Kondo further describes the Characteristic Amount Detection Unit 30 and Integration Estimation Unit 40 as the devices used to generate the Characteristic Amounts, as described in Paragraphs [0119, 0124, 0125]. Therefore, the Examiner submits that the Characteristic Amount Detection Unit 30, Integration Estimation Unit

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40, and Variance Calculation Unit 323 track the lengths of time, such as the total performance time $22C2+22C1+22C2$ of Fig. 25C and positive audience response time $22C1$ of Fig. 25C.

The Examiner has addressed Appellant's claimed "recording" step of Claim 1 (Pages 5-6 Section 10 of Final Office Action of October 27, 2008) using Kondo's teachings of Characteristic Amount 304 of Fig. 25C. Kondo generally describes the "Characteristic Amount" (identified by Appellant as "simplified graphs") as data representing "any one of or both of a movement amount and movement periodicity of the audience" (based on the analysis of a video signal) and "a piece or pieces of information on a volume of sound from the audience, periodicity of the sound, and a frequency component of the sound" (based on the analysis of an audio signal) (as Kondo describes in Paragraph [0020-0021]). In other words, an audience is monitored using cameras and microphones in order to acquire video and audio of their reactions to a performance. These audio and video signals are then used to estimate the state of the audience (i.e. clapping, laughing, or other movement).

Kondo discloses that Characteristic Amount 304 represents the volume (in terms of amplitude) of sound (Paragraphs [0096, 0124, 0126]). Kondo shows in Fig. 25C the periodicity of sound including voice data and a reference value $La3$ that, when the voice is larger than the reference value, a state of "laughing" is estimated ($22C1$) and, when the voice is not larger than the reference value, a state of "other movement" is estimated ($22C2$) (as described in Paragraph [0124]). In view of Paragraph [0124], the Examiner construes the y-axis of Fig. 25C to represent the amplitude of audible response that is recorded and, as explicitly shown in Fig. 25C, the Characteristic Amount is plotted with "Time" along the y-axis.

The Examiner has made particular reference to Characteristic Amount 304 of Fig. 25C as an exemplary demonstration of “recording a first length of time of a positive audience response” for the following reasons. Kondo discloses that “state” 22C1 represents points that the Characteristic Amount exceeds the reference value La3, which Kondo discloses represents a state of “laughter” (i.e. a positive response). The Examiner construes 22C1 to represent a measurement of time (i.e. a length) because the line representing the “state” is parallel to the Time axis (as shown in Fig. 25C). The Examiner further submits that the Characteristic Amounts are stored (i.e. “recorded”) onto a medium, such as Recoding Medium Drive 712 of Fig. 27, (as Kondo describes in Paragraphs [0128-130]).

Therefore, it is the Examiner’s position that line labeled 22C1 in Fig. 25C represents a length of time a positive audience response (i.e. a state of laughter) is detected. Additionally, the Examiner submits that Kondo’s teachings of using “frame periods” to determine an audience state, where the “frame periods” are “predetermined fixed periods of time” (as Appellant references in Kondo Paragraphs [0113, 0160]) does not influence the time duration represented by 22C1 (positive audience response) of Fig. 25C, but rather Kondo is using the “fixed periods” as windows of analysis regarding the total recording of the audience response. The Examiner will fully address the “fixed periods” aspect of Kondo in the discussion of Appellant’s Claim 4 limitations.

Therefore, the Examiner submits that element 22C1 of Kondo demonstrates “recording a first length of time of a positive audience response of one or more test subjects to a presentation” as required by Appellant’s Claim 1 limitation.

In response to point (3) of Appellant, the Examiner submits that the Characteristic Amounts of Kondo are in fact displayed. Kondo discloses that “Figs. 25A to 25C are graphs showing the estimated result...” (as described in Paragraph [0057]). In particular, Kondo discloses that Output Unit 50 “displays the estimated result using a display device”, also shown as Display Unit 716 of Fig. 27 Paragraphs [0057, 0128, 0130, 0157]).

In response to point (4) of Appellant, the Examiner submits that the Leroy reference was not cited to disclose “recording a first length of time of positive audience response...” and that this limitation is addressed with the teachings of Kondo, as presented above in reference to point (2) of Appellant.

In response to point (1) of Appellant, the Examiner submits that Kondo’s label of “Time” along the x-axis in Fig. 25C constitutes an “alphanumeric heading” and that any point along the Characteristic Amount of Fig. 25C could be construed as the “a first numeral value for the first length of time” because the Characteristic Amount is plotted as a function of time. However, to further clarify the teachings of Kondo, the Examiner has previously provided (Pages 5-6 Section 10 of Final Office Action) Leroy as a secondary reference for the purpose of supplementing features demonstrated by Kondo in Fig. 25C. Leroy teaches a method, similar to Kondo, of monitoring and analyzing audience response to a broadcast promotion where various methods of manipulating and displaying response data are demonstrated (Leroy Abstract).

In particular, the Leroy reference has been provided to demonstrate the display of “numeral” and “alphanumeric” values in correspondence with graphical data (as

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shown in Fig. 7 of Leroy). In a similar fashion to Kondo, Leroy provides a graph with an amplitude measurement along the y-axis (i.e. "No. of Calls") and a scale of time along the x-axis (i.e. "time (min)"). Leroy additionally demonstrates the numerical labeling of tick marks along the y-axis (in the case of Fig. 7 representing a length in a scale of minutes). As previously presented, it is the Examiner's position that it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the similar teachings of Kondo with the teachings of Leroy in order to provide the end user with descriptive labels and numeric references to aid in efficiently identifying the meaning of the displayed results.

The Examiner therefore submits that the combination of Kondo and Leroy do in fact teach the Claim 1 limitations of "displaying a first numerical value for the first length of time on a computer monitor;" and "displaying a first alphanumeric heading on the computer monitor which indicates what the first numerical value refers to".

Appellant presents that Claim 4 should not have been rejected under 35 U.S.C. 103(a) based on Kondo in view of Leroy.

Appellant presents that Kondo "does not suggest recording of displaying a total length of time of a presentation" because "Kondo uses fixed predetermined sequentially moving one frame time periods (Kondo, paragraph 0113, second to last sentence)" (Brief Page 12; with further reference to Brief Page 10 and Kondo Paragraph [0160]). Appellant additionally presents that "Leroy is not directed towards positive audience responses and it would not be obvious to combine Kondo and Leroy" (Brief Page 12-13). The Examiner respectfully disagrees.

Regarding Appellant's interpretation of "frame periods" as disclosed by Kondo, it is the Examiner's understanding that Kondo is using "fixed" or "moving one frame" time periods as windows of analysis in order to determine periodic aspects of the Characteristic Amount. In particular, Kondo describes in Paragraph [0106] "[t]o detect the periodicity, at least a signal of widow width (frame range) above a period detected must be used". It is the Examiner's position that Kondo is using "frame periods" in order to perform calculations such as a Fourier transform (as described in Paragraph [0160]) and that these "frame periods" are not representative of the total performance, but rather a section of the total record that is being further analyzed. The Examiner additionally notes that Kondo discloses at least two methods of determining a positive audience response, one based on the volume (or amplitude) of the response (Paragraph [0013]) and one based on the periodicity of the response (Paragraph [0014]). As the Examiner has established above, the method based on the volume of response has been used to address Appellant's Claim 1 limitations (i.e. threshold La3 of Fig. 25C). Therefore, Kondo's teachings of a method or means of determining a positive audience response using periods or frames do not diminish the fact that a duration of time is recorded in the process of this determination.

The Examiner has previously presented that Characteristic Amount 304 of Fig. 25C demonstrates the display of a total length of time of a presentation (Page 4 Section 7 and Page 7 Section 13 of Final Office Action). In particular, it is the Examiner's position that the total performance time is recorded as the sum of time lengths 22C1 and 22C2 of Fig. 25C (i.e. $22C2+22C1+22C2$). The Examiner further construes that the

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dotted lines in the length of time $22C2+22C1+22C2$ and the arrow along the time axis in Fig. 25C suggest that the recoded Characteristic Amount continues beyond what is shown in the figure. However, to supplement the teachings of Kondo, the Examiner has relied upon Leroy to teach Appellant's "displaying" limitations as required in Claim 4.

The Examiner has cited Fig. 5 of Leroy to demonstrate the displaying of "a second numerical value for the total length of time of the presentation" and "a second alphanumeric heading" indicating "what the second numeric value refers to". In particular, Leroy teaches displaying the time in minutes (# Min. Column of Fig. 5) for each program, such as "COVERT BAILEY'S SMART EXER" with a length of time of 39 minutes. In addition, regarding Appellant's assertion that "Leroy is not directed towards positive audience responses" the Examiner submits that Kondo, not Leroy, is used to address this limitation, as presented regarding the limitations of Claim 1. It is the Examiner's position that a similar motivation is applicable to the limitations of Claim 4, namely, providing the end user with descriptive labels and numeric references to aid in efficiently identifying the meaning of the displayed results.

Appellant presents that Claims 9 and 10 should not have been rejected under 35 U.S.C. 103(a) based on Kondo in view of Leroy.

Appellant presents that the combination of Kondo and Leroy does not teach the limitation of displaying "an accumulated amount of time of positive audience response of one or more test subjects for a first minute of the presentation and for a second minute" because Kondo "does not deal with amounts of time of positive audience response" and "Kondo's frames or windows are predetermined" (Brief Page 13-14). Appellant

additionally presents that Leroy “does not disclose determining and displaying positive audience response times” (Brief Page 14). The Examiner respectfully disagrees.

As the Examiner has previously presented regarding Claim 1 that line labeled 22C1 in Fig. 25C represents a length of time a positive audience response (i.e. a state of laughter) is detected. Additionally the Examiner has presented regarding Claim 4, Kondo's teachings of a method or means of determining a positive audience response using periods or frames do not diminish the fact that a duration of time is recorded in the process of this determination. The Examiner further submits that Kondo discloses "a variable window of time in which to analyze the audience response", however Kondo only discusses time in a magnitude of seconds (as Kondo describes in Paragraph [0106] and presented by the Examiner on Page 8 Section 16 of Final Office Action). It is the Examiner's position that this “variable window of time” could be construed to reach a duration of minutes, but has provided a teaching from Leroy in order to supplement this position. In particular, Leroy demonstrates a graphical display, similar to Kondo's Fig. 25C, that additionally labels the x-axis as time measured in minutes. The Examiner also notes that Leroy discloses measuring “the amount of money per minute of pledge time”, as disclosed in Col. 7 Lines 10-14. Therefore, the Examiner submits that the combination of Kondo and Leroy demonstrate "an accumulated amount of time of positive audience response of one or more test subjects for a first minute of the presentation and for a second minute of the presentation respectively".

Appellant presents that Claim 11 should not have been rejected under 35 U.S.C. 103(a) based on Kondo in view of Leroy.

Appellant present that the combination of Kondo and Leroy does not disclose “determining and displaying on the computer monitor a second numerical value for an average amount of time of positive audience response of one or more test subjects per minute of the presentation” because Kondo “does not deal with amounts of time of positive audience response” (Brief Page 14). Appellant additionally presents that Leroy “does not disclose determining and displaying positive audience response times per minute of presentation” (Brief Page 14). The Examiner submits that these limitations have been addressed with reference to the discussion of Claims 1, 4, 9, and 10.

Appellant presents that Claim 15 should not have been rejected under 35 U.S.C. 103(a) based on Kondo in view of Leroy.

Appellant presents that Kondo does not disclose “a performance timer for keeping track of the length of time of a performance or a positive audience response timer for keeping track of the length of time of a positive audience response to one or more portions of a performance” as required by Claim 15 for similar reasons presented regarding Claim 1 (Brief Pages 15-17).

The Examiner submits, as previously presented on Pages 4 Section 7 and Pages 9-11 Section 18 of Final Office Action, that the “performance timer” and “positive audience response timer” have been addressed by the Examiner using the teachings of Kondo. In particular, Kondo teaches a “frame range decision unit 3231”, shown in Fig. 12 that determines the time window used to analyze the audience response (i.e. performance timer), as disclosed in Paragraph [0106] of Kondo. Additionally, Kondo

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teaches “integration estimation unit 40” of Fig. 1 used to estimate the state of the audience using characteristic amounts (i.e. positive audience response timer), as described in Paragraph [0119]. The Examiner submits that Appellant’s remaining arguments have been addressed in the discussion of Claim 1.

Appellant presents that Claims 20 and 21 should not have been rejected under 35 U.S.C. 103(a) based on Kondo in view of Leroy.

The Examiner submits that Appellant’s arguments (Brief Page 17) have been addressed with reference to the discussion of Claims 9 and 10.

Appellant presents that Claim 22 should not have been rejected under 35 U.S.C. 103(a) based on Kondo in view of Leroy.

The Examiner submits that Appellant’s arguments (Brief Page 18) have been addressed with reference to the discussion of Claim 11.

Response to Claims 5, 6, 12, 13, 14, 16, 17, 19, 23, and 24 should not have been rejected under 35 U.S.C. 103 based on Kondo in view of Leroy and in view of Eldering.

Appellant presents that Claims 5 and 6 should not have been rejected based on Kondo in view of Leroy and in view of Eldering.

Appellant presents that the combination of Kondo, Leroy, and Eldering does not disclose the limitations of Claims 5 and 6 because “Eldering does not deal with amounts of positive audience response” (Brief Pages 18-19).

The Examiner submits that the “amounts of positive audience response” has been addressed with the teachings of Kondo, as presented in the discussion of Claim 1.

Appellant presents that Claims 12-13 should not have been rejected based on Kondo in view of Leroy and in view of Eldering.

Appellant presents that the combination of Kondo, Leroy, and Eldering does not disclose the limitations of Claims 12 and 13 because “Eldering does not deal with amounts of positive audience response” (Brief Pages 19-20).

The Examiner submits that the “amounts of positive audience response” has been addressed with the teachings of Kondo, as presented in the discussion of Claims 1 and 15.

Appellant presents that Claim 14 should not have been rejected based on Kondo in view of Leroy and in view of Eldering.

Appellant presents that the combination of Kondo, Leroy, and Eldering does not disclose the limitations of Claim 14 because “Eldering does not deal with amounts of positive audience response” (Brief Pages 20-21).

The Examiner submits that the “amounts of positive audience response” has been addressed with the teachings of Kondo, as presented in the discussion of Claims 1 and 15.

Appellant presents that Claims 16, 17, and 19 should not have been rejected based on Kondo in view of Leroy and in view of Eldering.

Appellant presents that the combination of Kondo, Leroy, and Eldering does not disclose the limitations of Claim 16, 17, and 19 because “Eldering does not deal with amounts of positive audience response” (Brief Pages 21-23).

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The Examiner submits that the “amounts of positive audience response” has been addressed with the teachings of Kondo, as presented in the discussion of Claims 1 and 15.

Appellant presents that Claims 23 and 24 should not have been rejected based on Kondo in view of Leroy and in view of Eldering.

Appellant presents that the combination of Kondo, Leroy, and Eldering does not disclose the limitations of Claim 23 and 24 because “Eldering does not deal with amounts of positive audience response” (Brief Pages 23-24).

The Examiner submits that the “amounts of positive audience response” has been addressed with the teachings of Kondo, as presented in the discussion of Claims 1 and 15.

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(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Patrick A Ryan/
Examiner, Art Unit 2427

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"For Scott Beliveau"